

Research Article



Nexus Between Livestock Income and Rural Livelihood: A Case Study of Lasbela, Balochistan

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Abstract | This study engrossed the potential contribution of the livestock sector for resumption of households' livelihood in district Lasbela, Balochistan. Livestock is a protagonist in stimulating the economy and improving people's living conditions. The study used primary data which were composed via well-regulated questionnaires from one hundred livestock farmers of diverse Tehsil/Union Council of District Lasbela. The findings of the study exhibited that trivial farm holders widely used livestock for income generation. Furthermore, livestock have a predominant role to accomplish the rudimentary needs of the households. Moreover, livestock offer opportunities of income generation and to spend it on education, health and housing, which eventually enhanced the living standard of the households. However, orthodox and dogmatic methods, inadequate awareness and lack of animals' hospitals lead to hamper livestock efficiency than the potential. Therefore, it is urged that government should make veterinary services available to the farmers at their door steps to improve their income, livelihood and standard of life. Moreover, this can be one of a feasible solution to the problems of poverty, malnourishment and starvation in backward and undeveloped areas like Lasbela.

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1. Introduction

Agriculture is a corner stone in aggregate income of Pakistan. Nevertheless, climate change is increasing the cost of production and shrinking the net profits, which lead to affect the livelihood of the people associated to agriculture sector. However, in a given situation livestock is still one of the foremost sources to support the farmers for their livelihood. Presently about 1.3 billion people are living in developing countries which directly or indirectly rely on livestock for their livelihood. As we know

that the paybacks of livestock are manifold; livestock husbandry dominates poverty, food deprivation, undernourishment and malnutrition, as well as it creates source of income for the households. Besides, livestock also underwrites the households' demand for; current income, wealth, renewable energy and fertilizer. According to Freeman *et al.* (2008), livestock income is an important component of family income in the Southern Africa. The results of his study exhibited that, just over half of the respondents were transformed to both domestic and commercial system of livestock farming. Ali (2007) quantified that the

livestock is providing income to around 675 million farmers worldwide and they are entirely depending on animal husbandry. Moreover, livestock husbandry helps the rural households at micro level to uplift their sources of income and livelihood. [Khalil \(2007\)](#) enumerated that livestock provides milk and meat to the farmers and general masses. And both milk and meat are the indispensable requirements of the people and food industry.

In the contemporary world food safety is one of the major challenges for developing countries like Pakistan. Livestock products are the primary source of food and protein in Pakistan [Khan et al. \(2015\)](#) and [Khan et al. \(2018\)](#). The daily requirement of animal protein is reported on average 27 grams, while in Pakistan the per capita procurement is only 14.25 grams, which shows a 48.7% protein discrepancy, which can be attained through livestock and poultry. [Miller \(2001\)](#) stated that the demand for animal products will double in developing countries over the next 20 years, which will hastily increase agricultural activity. Consequently, to increase livestock production and to combat the lack of food availability, farmers must take decisions on cutting edge technology and innovation. Henceforward, in this context, the contemporary study is trying to explore and conjecture the potential of livestock for uplifting the livelihood of rural households in Lasbela. The rest of the study prearranged as follow, section two offers methodology while subsequent sections are based on result and discussions and conclusion respectively.

2. Materials and Methods

The study was conducted at District Lasbela, Balochistan and this district is further divided into five Tehsils/ union councils named: Uthal, Gadani, Bela, Dureji and Hub. Livestock production is one of the foremost sources of income for households and this area is renowned for the livestock production. This study has selected twenty samples from each union council randomly and the total sample size is 100.

Considering the nature of the data, the collected data was further scrutinized through various statistical tools, namely: simple frequencies distribution, percentages, mean and standard deviation. Results of the [Table 1](#) exhibit that 50% of the livestock farmers aged between 35-50 years. However, 30% of the respondents were under the age 35 years which

divulges that a considerable number of the youth is also associated to the livestock farming in Lasbela. The literacy rate of the district was not so satisfactory as 58 % of the farmers were found illiterate, while 23%, 15% and 04% of the farmers have primary, secondary and higher secondary level of education respectively. Most of the farmers observed had small land holdings as majority of them (75%) have less than 10 hectares of land while fewer have above 10 hectares of farms.

Table 1: Descriptive statistics of the respondents.

	Frequency	Percentage
Literacy Rate	58	58%
Up to Primary	23	23%
Secondary Level	15	15%
Higher Secondary Level and Above	04	04%
Land holding size (hectares) up to 5	40	40%
06-10	35	35%
Above 10	25	25%
Age (years) up to 35	30	30%
36-50	50	50%
Above 50	20	20%

Note: Authors own valuations from primary data which were collected via well-established questionnaires from various Tehsil of Lasbela, Balochistan.

The crucial goal of livestock farming in rural areas is to generate income and to bring sustainability in livelihood availability. [Table 2](#) offers the descriptive statistics of respondents' source of income. Roughly 37% of farmers declared livestock as inclusive source of income and livelihood whereas 63% of farmers are enumerated livestock as a partial source of income and livelihood: since, these farmers are related to additional businesses and crop production. The clear majority (60%) of livestock owners exploited livestock just for domestic purpose while the 20% owned livestock only for commercial purpose and remaining farmers listed livestock for twofold purpose; domestic and commercial.

The average earnings of the small farmers are up to Rs. 10,000 while progressive farmers just earned between Rs. 10,000 to Rs. 17,000 per month from livestock farming. The major share of the income was earned through selling milk and marketing animals for different purposes. For example, the results of [Table 3](#) portrayed that around 28 % farmers were earning Rs. 10,000 and below while 52% farmers earned between Rs. 10,000 to Rs. 17,000 average monthly

income from livestock. Whereas 12% of the farmers were receiving money underneath Rs. 25000 while 8% were those farmers who were earning more than Rs. 25000 through good agriculture techniques. These progressive farmers just adopted advanced farming practices by using new technique and technologies Memon *et al.* (2015). Similarly, our outcomes are in lines with the results of the Alvi and Ashraf *et al.* (2015) and Shaikh *et al.* (2016) as they discovered that crop farming sideways with livestock are one of the most feasible sources to upsurge the household's income.

Table 2: Descriptive statistics of the respondents income sources.

Income Sources	Fre-	Per-
	quency	centage
Livestock With Other Occupations		
Livestock Husbandry	37	37%
Livestock and Minor Crops/Orchard farming	18	18%
Livestock and services	25	25%
Livestock, Minor Crops/orchard and services	20	20%
Purpose Of Livestock		
Livestock for Domestic Purpose	60	60%
Livestock for Commercial Purpose	20	20%
Livestock for both Domestic & commercial purpose	20	20%

Note: Authors own valuations from primary data which were collected via well-established questionnaires from various Tehsil of Lasbela, Balochistan.

Table 3: Dissemination of households monthly income from the livestock.

Monthly Income	Frequency	Percentage
Up to 10,000	28	28 %
10,000 to 17,000	52	52 %
17,000 to 25,000	12	12 %
25,000 and above	08	08 %
Total	100	100%

Note: Authors own valuations from primary data which were collected via well-established questionnaires from various Tehsil of Lasbela, Balochistan.

Table 4 exhibited the results of the farmer's reliance on livestock as source of income. The results clearly indicate that the role of livestock in income generation is exceptionally crucial and paramount. However, 22% of the respondents believed that livestock have not sufficiently supported their domestic needs. In contrast, 78% of farmers have recognized the

maximum contribution of livestock in satisfying family needs.

Table 4: Households reliance of livestock as a source of income for their livelihoods.

Dependency Of Lsi	Percentage	Frequency
Zero percent	3	3%
Twenty or Below Twenty Percent	4	4%
Forty or Below Forty Percent	15	15%
Sixty or Below Sixty Percent	27	27%
Eighty or Bellow Eighty Percent	34	34%
100 or Less than Hundred	29	29%
Total	100	100%

Note: Whereas: LSI (Livestock Income); Authors own valuations from primary data which were collected via well-established questionnaires from various Tehsil of Lasbela, Balochistan, Balochistan.

Table 5: Effect of livestock income on education, livestock health and livelihoods.

SEA	Education of the children	Livestock health or Standard	Food requirements/ Livelihoods
SD	09%	17 %	01 %
Disagree	17%	10 %	13 %
Neutral	24%	21 %	23 %
Agree	30%	27 %	29 %
SA	20%	25 %	34 %
Total	100%	100%	100%

Effect of livestock income empowerment, family income and health

	Empowerment	Family income	Family Health
SD	07 %	04%	10%
Disagree	09 %	06 %	12%
Neutral	10%	10 %	20%
Agree	46 %	45%	33%
SA	28 %	35%	25%
Total	100%	100%	100%

Whereas: Socio-economic aspects (SEA), Strongly disagree (SD), Strongly Agree (SA).

The outcomes of the Table 5 and 6 demonstrated that livestock farming is plateful for food requirements/ livelihood, family income, empowerment, family health and education as well as livestock upgrading. Moreover, it is worth mentioning that livestock is not only empowering the society but predominantly also plays a key role in women empowerment in the countryside as we know that typically in the rural areas' women are affectionately participating in

livestock farming. Furthermore, Livestock farming is firming family livelihood, health and education as livestock provides foremost segment of family income via selling of livestock products and living animals. Nevertheless, insufficient market facilities, lack of information and infrastructures hamper livestock income to some extent.

The satisfaction of socio-economic needs of households are ranked in Table 6, which discloses that food requirements/livelihood, family income, empowerment, family health and education as well as livestock health are ranked first, second, third, fourth, fifth and sixth respectively. Nonetheless, in order to manage the persistence food insecurity, starvation, malnutrition and undernourishment in Lasbela and other rural areas of Balochistan. It is necessary that government should pay a particular attention to the livestock sector of Balochistan to improve the livelihood of the local people and uplift their living standard. The results of the study simplify that the livestock farming is strengthening livelihoods and life standard of the farmers.

Table 6: Contribution of livestock income to socio-economic indicators rank wise.

	Mean + SD	Ranks
Family income	3.22 + 0.080	1
Food requirements	3.19 + 0.078	2
Empowerment	3.18 + 0.085	3
Education of the children	3.00 + 0.077	4
Family Health	2.99 + 0.076	5
Living health/standard	2.98 + 0.080	6

Note: Socio-economic Rank Score Mean + SD indicators Order.

Conclusion and Recommendations

This study has highlighted that livestock is an integral part of Balochistan society and economy. The important finding of study shows that the development of Balochistan is only possible if huge investment is made on the livestock particularly in rural areas. Furthermore, presently livestock seems to play a key role in achieving a healthy living stranded and an important factor to reduce poverty. Moreover, for majority of the farmers, livestock is one of the primary sources of income which supports livelihood and other necessities of life in rural areas of Balochistan. On average the livestock income is used for education, health and other food requirements,

etc. There is no doubt that livestock provides food and money to a big chunk of population; however, the socio-economic conditions of farmers are still underprivileged. Therefore, it is recommended that to encourage adaptability and improve accessibility and management facilities for the farmers such as artificial insemination and other essential state of the art technologies. Furthermore, it will be also very prolific that the farmers can acquire acquaintance about animal husbandry, livestock management and marketing.

Author's Contribution

Khalid Khan developed the first draft of the manuscript and supervised data collection, field survey and data analysis. Saima Liaqat furnished the questionnaire and led the data analysis while Somaiya Rashed and Ihsanullah Kakar performed field survey, sampling and data analysis.

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